

No.



7700036

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Soybean Research Foundation, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT.

UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS OFFICIAL CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS PROVIDED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Gutwein 180'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 24th day of August in the year of our Lord one thousand nine hundred and seventy-seven

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture



APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY PL 70554L 7.29.77		1b. VARIETY NAME GUTHWEIN 1804 PL 70554L 7.29.77		FOR OFFICIAL USE ONLY PV NUMBER 7700036	
2. KIND NAME Soybeans		3. GENUS AND SPECIES NAME Glycine max (L.) Merr.		FILING DATE 1-31-77	
4. FAMILY NAME (BOTANICAL) Leguminosae		5. DATE OF DETERMINATION February, 1975		TIME 11:30 A.M. P.M.	
6. NAME OF APPLICANT(S) Soybean Research Foundation, Inc.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Box #72 Mason City, Illinois 62664		FEE RECEIVED \$ 250.00 \$ 250.00 \$ 250.00	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Illinois		8. TELEPHONE AREA CODE AND NUMBER 217 482-3219	
11. DATE OF INCORPORATION April 28, 1965					

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Arnold L. Matson
Director of Soybean Breeding
Soybean Research Foundation, Inc.
Mason City, Illinois 62664

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☐ 13D. Exhibit D, Additional Description of the Variety.

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed?
(See Section 83(a). (If "Yes," answer 14B and 14C below.) ☒ YES ☐ NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations?

☐ YES ☒ NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

☐ FOUNDATION☐ REGISTERED☐ CERTIFIED

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal?

☒ YES ☐ NO

16. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

Jan 25, 1977
(DATE)Arnold L. Matson
(SIGNATURE OF APPLICANT)

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(SIGNATURE OF APPLICANT)

(DATE)

Application 7700036

Gutwein 180 (PL 70554L)

Exhibit A -

Gutwein 180 soybeans (*Glycine max* (L.) Merr.) originated from a single F₆ plant grown in 1969 from the cross Harosoy 63 x PI 248406. This plant was discovered to be heterozygous for tan and brown pods and in 1974 seed from randomly selected plants were grown in plant rows and all seed produced in the rows found to be homozygous for tan pods were bulked to produce breeders seed of Gutwein 180. The bulk appears to be stable for all phenotypic characteristics. All breeding and selection work was carried out at the Soybean Research Foundation under the supervision of Dr. Arnold L. Matson.

Exhibit B -

Gutwein 180 is most similar to SRF 150 but Gutwein 180 is a little bushier, has brown pubescence instead of grey and has ovate leaves instead of lanceolate leaves. It also has about 2800 seeds per lb. compared to 3000 for SRF 150. DS 160 and Gutwein 180 are phenotypically identical except that DS 160 has brown pods and Gutwein 180 has tan pods.

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Williams	Petiole angle	
Leaf shape	Corsoy	Seed size	Hodgson
Leaf color	Wayne	Seed shape	Amsoy
Leaf surface		Seedling pigmentation	Harosoy

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT
				Width	Length	Protein	Oil	
Submitted	119	1.8	32"	62 mm	93 mm	41.6	22.4 %	
Name of similar variety								
Corsoy	123	2.7	34"	78mm	124 mm	41.5	20.7	

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

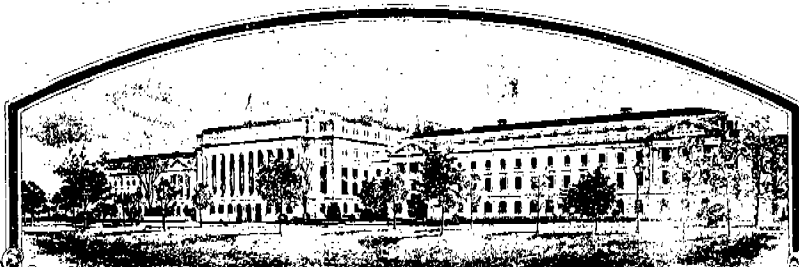
SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"

00004

No.



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Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

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SOYBEAN

'Gutwein 180'

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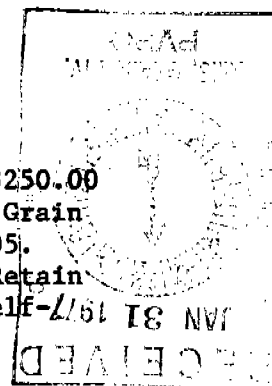
Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

[Signature]
Secretary of Agriculture

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, National Agricultural Library, Beltsville, Maryland 20705. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.



ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give (1), the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. (2), the details of subsequent stages of selection and multiplication. (3), the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4), evidence of stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties; (1) identify these varieties and state all differences objectively; (2) Attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form for all characteristics, for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe; such as; plant habit, plant color, disease resistance, etc.
- 14A If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Soybean Research Foundation, Inc.

ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code)

P.O. Box #72
Mason City, Illinois 62664

FOR OFFICIAL USE ONLY

PVPO NUMBER 7700036

VARIETY NAME OR TEMPORARY
DESIGNATIONGUTWEIN 180
PL 70554L

7.29.77

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. SEED SHAPE:

 1 = SPHERICAL 2 = SPHERICAL FLATTENED 3 = ELONGATE 4 = OTHER (Specify)

2. SEED COAT COLOR:

 1 = YELLOW 2 = GREEN 3 = BROWN 4 = BLACK
5 = OTHER (Specify)

SHADE:

 1 = LIGHT 2 = MEDIUM 3 = DARK

3. SEED COAT LUSTER:

 1 = DULL 2 = SHINY

4. SEED SIZE

 GRAMS PER 100 SEEDS

5. HILUM COLOR:

 1 = BUFF 2 = YELLOW 3 = BROWN 4 = GRAY 5 = IMPERFECT BLACK
6 = BLACK 7 = OTHER (Specify)

SHADE:

 1 = LIGHT 2 = MEDIUM 3 = DARK

6. COTYLEDON COLOR:

 1 = YELLOW 2 = GREEN

7. LEAFLET SIZE (See Reverse):

 1 = SMALL 2 = MEDIUM 3 = LARGE

8. LEAFLET SHAPE:

 1 = OVATE 2 = OBLONG 3 = LANCEOLATE 4 = ELLIPTICAL 5 = OTHER (Specify)

9. LEAF COLOR (See reverse):

 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREEN

10. FLOWER COLOR:

 1 = WHITE 2 = PURPLE
3 = OTHER (Specify)

11. POD COLOR:

 1 = TAN 2 = BROWN 3 = BLACK

12. POD SET:

 1 = SCATTERED 2 = CONCENTRATED

13. PLANT PUBESCENCE COLOR:

 1 = GRAY 2 = BROWN 3 = OTHER (Specify)

SHADE:

 1 = LIGHT 2 = MEDIUM 3 = DARK

14. PLANT TYPES (See Reverse):

 1 = SLENDER 2 = BUSHY 3 = INTERMEDIATE

15. PLANT HABIT:

 1 = DETERMINATE 2 = INDETERMINATE
3 = OTHER (Specify)

16. HYPOCOTYL COLOR:

 1 = GREEN 2 = PURPLE

17. SEED PROTEIN:

 1 = A 2 = B18. NUMBER OF DAYS TO FLOWERING
(Place a zero in first box (e.g.) when
days are 9 or less.)

19. MATURITY GROUP:

 1 = 00 2 = 0 3 = I 4 = II 5 = III
6 = IV 7 = V 8 = VI 9 = VII 10 = VIII20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C. (Place a zero in first box
(e.g.) when size is 9 mm. or less.) MM. LENGTH
OF SEEDLING MM. LENGTH
OF COTYLEDON MM. WIDTH
OF COTYLEDON

21. DISEASE: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

 BACTERIAL
PUSTULE SOYBEAN
CYST DOWNY
MILDEW PURPLE
STAIN POD AND
STEM BLIGHT ROOT
KNOT FROGEYE STEM
CANKER PHYTO-
PHTHORA BROWN
STEM ROT TARGET
SPOT BROWN
SPOT BUD
BLIGHT WILDFIRE RHIZOCTONIA
ROT OTHER (Specify)

00003